

20001120.ba v03_n040.bam.20001120

>From ???@??? Mon Nov 20 13:50:15 2000 -0600
Date: Mon, 20 Nov 2000 13:47:38 CST
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 3040
Message-Id: <20001120205031.CD32C5329@devel43.theporch.com>

BOATANCHORS Digest 3040

Topics covered in this issue include:

- 1) Re: AC Motor info needed
by "Richard Brunner" <rbrunner@gis.net>
- 2) Re: AC Motor info needed
by Dan <hankarn@pacbell.net>
- 3) Re: Photomultiplier tubes (life)
by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
- 4) RE: ART-13 Autotune Frequency Reset Accuracy?
by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
- 5) Who wanted the 3AP1?
by John Poulton <jp@cs.unc.edu>
- 6) When is a 12SQ7 not a 12SQ7?
by "A.B. Bonds" <ab@vuse.vanderbilt.edu>
- 7) Re: Removing Dynomo Labels
by "Don Ehrlich" <ehrlich@olypen.com>
- 8) Heath HW-20 manual needed
by Jack Antonio <dia@dia.reno.nv.us>
- 9) NEED NAMEPLATE FOR LM PS
by "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
- 10) Re: GROUNDING
by Scott Robinson <spr@earthlink.net>
- 11) Re: GROUNDING
by Scott Robinson <spr@earthlink.net>
- 12) RE: Lazy BFO?
by Morris Odell <Morris0@vifp.monash.edu.au>
- 13) Need Info on Halli SX-42 part
by JPevner@aol.com
- 14) WTB: PL-172 tube
by AA5QT@aol.com
- 15) Re: Need Info on Halli SX-42 part
by Al Parker <anchor@coastalnet.com>
- 16) Re: AC Motor info needed
by "Richard Brunner" <rbrunner@gis.net>
- 17) Re: When is a 12SQ7 not a 12SQ7?
by Arden Allen <gumbear@pacbell.net>
- 18) Re: AC Motor info needed

- by Dan <hankarn@pacbell.net>
- 19) Lighting surge via phone line, my recent experience
by "Mark Shaum" <k9tr@mtco.com>
 - 20) Heath SB-102 ?
by BEN NOCK <G4BXD@compuserve.com>
 - 21) Oddball tube
by "John Gibson" <gibsonj@mindspring.com>
 - 22) Re: AC Motor info needed
by jan@skirrow.org
 - 23) Re: Line Cords
by Richard Loken <richardlo@devax.admin.athabasca.ca>

Message-ID: <007c01c0521e\$d3cd0860\$431c29d8@tne1tcds>
From: "Richard Brunner" <rbrunner@gis.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: AC Motor info needed
Date: Sat, 18 Nov 2000 20:49:00 -0500
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Jan said:

"I have a piece of gear with an AC fan motor which uses a starting capacitor. What I'm curious about is what happens if this cap is open???"

It won't start. There are two windings on the motor, and the "starting winding" has the capacitor in series with it to provide a phase shift, simulating a two-phase motor, for starting. After it starts, if you disconnect the capacitor it will continue to run. Also, if you wrap a string around the shaft and pull hard to get it up to speed, it will also continue to run without the capacitor.

Richard Brunner, AA1P, rbrunner@gis.net.

Date: Sun, 19 Nov 2000 05:22:31 -0800
From: Dan <hankarn@pacbell.net>
Subject: Re: AC Motor info needed
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Message-id: <3A17D417.BF8D5BAC@pacbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=us-ascii
Content-transfer-encoding: 7bit

Capacitor start motors have a switch in the start winding that opens when the motor gets up to speed and switches over to the run winding.

Hank

Date: Sun, 19 Nov 2000 08:58:29 -0500
From: "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
Subject: Re: Photomultiplier tubes (life)
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <200011190858_MC2-BB5C-BB93@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

Lenox and group,

In the 70's and early 80's, most of our pipe inspection machines had gamma ray wall thickness gauges using a PM tube (or tubes) as the detector. The gauges were mounted on the rotating head which ran at about 120 RPM. The machines often ran 16 hours a day. I don't recall any service life problems with the tubes. The usual failure mode was water getting into the socket and getting friendly with the high voltage.

>Do photomultiplier tubes (as used in scintillation counters) have a limited life? If so, does anyone have an idea what sort of life they have? Would a monitor (scintillation counter) that operated 24 hours a day be expected to last for years?

<

73,
Robert Downs
<RWDowns_WA5CAB@compuserve.com>
Houston

Date: Sun, 19 Nov 2000 08:58:31 -0500
From: "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
Subject: RE: ART-13 Autotune Frequency Reset Accuracy?
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <200011190858_MC2-BB5C-BB94@compuserve.com>
MIME-Version: 1.0

Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

Chris & group,

Before I went to Vietnam in '67, and after Navy Mars outlawed AM, I used to
check into the 4010 (4008.5) traffic net every morning using a T-47 on CW=
. =

I had one of the channels set to 4009 or thereabouts, and it always went
back there when I selected that channel. As Mike pointed out, and as the=
Operator's manual says, you should "approach" the final setting only in t=
he
clockwise direction, and recheck the setting after locking it (cycle the
selector mechanism). =

I have a bunch of NOSB tuning heads (and not only the frequency selector
one) but the only use that I've ever gotten out of them was for the shiny=
black knobs. So I never paid any attention to any backlash. If asked, I=
would have assumed that it was there.

Robert Downs
<RWDowns_WA5CAB@compuserve.com>
Houston

Date: Sun, 19 Nov 2000 10:46:13 -0500 (EST)
From: John Poulton <jp@cs.unc.edu>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Who wanted the 3AP1?
Message-ID: <Pine.GHP.4.10.10011191044090.15959-1000000@mira.cs.unc.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Someone on the list was looking for one of these
CRT's, but I've misplaced the mail. If you need
a 3AP1, let me know!

73, John Poulton KF40ZY

Message-Id: <1.5.4.32.20001119171053.009a238c@mailhost.vuse.vanderbilt.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Sun, 19 Nov 2000 11:10:53 -0600
To: Old Tube Radios <boatanchors@theporch.com>
From: "A.B. Bonds" <ab@vuse.vanderbilt.edu>
Subject: When is a 12SQ7 not a 12SQ7?

The short answer is: When it is a 12SQ7GT.

Works like this. I got some very fine suggestions from you good folks regarding the moribund BFO oscillator on my S-38. (Incidentally, Gary, since the cathode is grounded one of the diodes is used as a not-very-effective noise limiter and the other is unused.) Regrettably, none really worked. I was nosing around to try to improve the performance, which was pretty cruddy, and found only 16 v on the detector/preamp plate (instead of 60 or so). This tube is also a 12SQ7 and the triode is an audio preamplifier. I thought the 220k plate resistor might be suspicious, but replacement yielded no joy. The grid was biased at about -0.5 v, where it oughta be. Hmm, thinks I, this toob is drawing way too much current. Gassy? But my stalwart Hickok 600A sez, "Oh, no, both toobs are FB." Whatever the cause, both 12SQ7's that came in the set were Hytron 12SQ7GT's. I crammed in some old cruddy metal ones and voila! The set comes alive. Triode voltage is 64, and the BFO oscillates. But the S38 still has some IF oscillation on the high end of band 2, go figure.

Once again the warning not to believe one's toob tester oozes out of the murk and laughs at me.

Say, I have a coupla spare 12SQ7GT's, they test real good, anyone want 'em? Or should they go to eBay (Tee Hee)?

73 A. B. Bonds

Message-ID: <000201c0525a\$cd906320\$93f9cdd0@fpfzqlga>
From: "Don Ehrlich" <ehrich@olypen.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "boatanchor message" <boatanchors@theporch.com>
Subject: Re: Removing Dynomo Labels
Date: Sun, 19 Nov 2000 10:58:30 -0800
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Your're gonna have to move that meter out of the way and use heat. Dymo labels simply do not stick that well so my guess is the original owner used

some other glue (which I have had to do in the old days). Solvents are not likely to work since the label itself will not absorb solvents. Most adhesives, and perhaps the dymo label itself, will soften with heat and, with care, it will not hurt the paint.

Don K7FJ

> I have a very good appearing transmitter with the meter in the top
> middle of the front panel. The paint is VERY GOOD. About 1/2 inch above
> the clear plastic meter is probably the original owner's call sign on a
> red Dyno Label that has been there for at least 40 years. The label is
> stuck tighter than Dick's hatband and I want it off of the front panel
> without damaging the paint. It is funny that I never had that kind of
> luck sticking one of those plastic Dyno Labels. The edges are adhered
> tightly. I have tried Goo Gone a couple of times with no results. I am
> afraid to use heat because of the proximity to the meter. I don't want to
> scratch the paint. Any Suggestions? 73, John, K5PGW
>

Message-ID: <3A1841F9.305@dia.reno.nv.us>
Date: Sun, 19 Nov 2000 13:11:21 -0800
From: Jack Antonio <dia@dia.reno.nv.us>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Heath HW-20 manual needed
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Good afternoon,

I have a Heathkit HW-20 that I am trying to get running, it has suffered meltdown of the wiring harness in the audio compartment. I have a bunch of charred insulation and bare wires sticking out.

I have a copy of the manual, but unfortunately the schematic is a little too fuzzy to be of help, and the pictorial layouts are missing.

Anyone have a complete copy of the manual for sale?

Or would anyone be willing to make a good copy of the schematic and pictorials of the audio compartment?? More than willing to pick up copying and postage costs.

The HW-10 is the 6 meter version, and the areas that I am interested

in appear to be identical, so would be happy with that information instead.

Thanks

Jack Antonio WA7DIA
dia@dia.reno.nv.us

Date: Sun, 19 Nov 2000 16:16:17 -0500
From: "ROBERT W. DOWNS" <RWDowns_WA5CAB@compuserve.com>
Subject: NEED NAMEPLATE FOR LM PS
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <200011191616_MC2-BB76-3703@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

Groups,

I recently picked up a CRR-20104 AC power supply for some models of the LM frequency meter. Also came with the CRR-10120 shock mount and both cables.

What it didn't come with were the nameplates (PS and mount). Internal evidence (nameplates on the transformers) identified the contractor as Bendix, hence the "CRR" contractor code. So I'm looking for nameplates for both the PS and the mount.

Strangely enough, examination of the paint where the nameplates belong indicates that the nameplates were never there. The whole thing looks NOS, except for the AC power cable which got chopped off at some point and a smaller diameter cable spliced on. =

73,
Robert Downs
<RWDowns_WA5CAB@compuserve.com>
Houston

Message-Id: <v03007802b63df9951589@[209.179.192.134]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Date: Sun, 19 Nov 2000 13:43:04 -0800
To: Old Tube Radios <boatanchors@theporch.com>
From: Scott Robinson <spr@earthlink.net>
Subject: Re: GROUNDING

>To: boatanchors@theporch.com
>
>Someone mention megging his ground, showed 5 ohms.
>
>That's *DC* resistance.
>
>Lightning is an RF-rich event. It cares about impedance, not just
>resistance.
>
> -John Sehring (Sat, Nov 18, 2000, temporarily in Chicago) UCC WB0EQ

John,

Yes, but if the DC resistnace is 5 ohms the AC resistance is at least of that order. This tells you that your ground rod won't sink several thousand amps very successfully...

Regards,

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Message-Id: <v03007803b63e0b844c3b@[209.179.192.134]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Sun, 19 Nov 2000 14:59:57 -0800
To: Old Tube Radios <boatanchors@theporch.com>
From: Scott Robinson <spr@earthlink.net>
Subject: Re: GROUNDING

>Hmmm.....and what would you recommend to sink several thousand amps?
>
>73,
>Steve W2ZR

I'd recommend a large distance from the event!

Seriously, there are specialty companies that offer suites of products to take care of these situations. If I had an antenna farm and lived in thunderstorm country, I 'd be their customer.

Regards,

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Message-ID: <07A064EA6042D4118A62009027F70E77870B@nt_exchange.vifp.monash.edu.au>
From: Morris Odell <MorrisO@vifp.monash.edu.au>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Lazy BF0?
Date: Mon, 20 Nov 2000 08:37:25 +1100
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"

Hi AB,

> No, I don't know what kind of oscillator this is. It does
> NOT match the
> schematic, but the wiring looks original. Here's the
> topology: Uses the
> triode of a 12SQ7. 15k from B+ to the plate, no bypass, so plate can
> bounce. This is coupled to the top of the coil with a 0.01
> uF. The coil
> has a tap that is grounded. The bottom of the coil is
> attached to the grid
> through the parallel combination of a 47k/220 pF mica. The
> entire coil
> (i.e., top and bottom) is shunted by a resonating cap, 470 pF
> mica. The
> cathode is grounded.

This sounds like a version of what I call a "tickler" oscillator of the sort that is commonly used in broadcast receiver converters. It has inductive feedback from a plate winding (here resistance coupled to the plate) to a grid winding with a classical 47K bias resistor. The difference here is in the coupling arrangement, keeping B+ off the coil, and in the resonating cap

which is across the entire winding instead of just the grid winding as in the usual local osc arrangement.

Really it's generically a Hartley with the cathode connected to the coil tap (at ground potential). More usually the plate is at RF ground potential.

With regard to its reluctance to oscillate - you need to eliminate all the components! This is a pretty simple circuit and there's not much that can go wrong but OTOH all the components are vital to its operation. After tube substitution I would check the mica grid coupling cap and make sure the B+ behind the plate resistor is properly decoupled.

> The 0.01 coupling cap was
> replaced with a mylar unit. Would this circuit depend on coupling cap
> leakage to go? That would tend to bias the grid positive,
> the plate lives
> at something like 65 v when turned on.

I don't think so. The tap on the coil is grounded so the grid potential will not be affected by capacitor leakage. Down here we never had AA5 type radios but I have read that there are all sorts of funny tricks to them. I doubt however that any designer would rely on a capricious property like capacitor leakage to make a circuit work properly. Mind you, in those days of wax caps leakage was probably so inevitable that it could be relied on :-)

73 de Morris VK3DOC

From: JPevner@aol.com
Message-ID: <8.c5fef4d.2749c69d@aol.com>
Date: Sun, 19 Nov 2000 19:13:17 EST
Subject: Need Info on Halli SX-42 part
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Folk;

Does anyone know what the value of R34 (the S-meter potentiometer) is?? Mine is fried and unmeasurable, and neither the schematic/parts list gives a value.

TIA,

Jon P

p.s. please reply direct, I doubt too many people want to know about this.

From: AA5QT@aol.com
Message-ID: <a.5262a37.2749d33c@aol.com>
Date: Sun, 19 Nov 2000 20:07:08 EST
Subject: WTB: PL-172 tube
To: Old Tube Radios <boatanchors@theporch.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Anyone have one of these goodies they'd be willing to part with?

73, Gary K5QT

Message-Id: <3.0.6.32.20001119204554.008ebb20@mail2.coastalnet.com>
Date: Sun, 19 Nov 2000 20:45:54 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: Al Parker <anchor@coastalnet.com>
Subject: Re: Need Info on Halli SX-42 part
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: 8bit

Hi John,

I'll answer to all, 'cuz it's not apparent in the Halli manual, but I found it in the Sams. It's 500ohm according to Sams.

73,

Al, W8UT

New Bern, NC

BoatAnchors appreciated here

anchor@coastalnet.com or anchor@ec.rr.com

(both work now, coastalnet will go away soon)

And remember; "-They don't make tubes nowadays like they used to..."

=====

At 07:13 PM 11/19/2000 EST, JPevner@aol.com wrote:

>Does anyone know what the value of R34 (the S-meter potentiometer) is??

Mine

>is fried and unmeasurable, and neither the schematic/parts list gives a value.

>

Message-ID: <01eb01c05297\$9f44cf00\$431c29d8@tneltcds>
From: "Richard Brunner" <rbrunner@gis.net>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Old Tube Radios" <boatanchors@theporch.com>

Subject: Re: AC Motor info needed
Date: Sun, 19 Nov 2000 21:13:39 -0500
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

"Capacitor start motors have a switch in the start winding that opens when the motor gets up to speed and switches over to the run winding."

Not quite. The "run" winding is connected all the time, and the "start" winding is in series with the capacitor and is disconnected by a centrifugal switch when the motor is up to speed. The starting winding is short-time duty rated, thus the switch is required. The capacitor creates a phase shift in the start winding, creating a two-phase motor for starting. As we all know, the single-phase motor has no starting torque - gotta have two or three phases to create a rotating magnetic field.

Richard Brunner, AA1P, rbrunner@gis.net

Date: Sun, 19 Nov 2000 19:30:47 -0800
From: Arden Allen <gumbear@pacbell.net>
Subject: Re: When is a 12SQ7 not a 12SQ7?
To: Old Tube Radios <boatanchors@theporch.com>
Message-id: <0G4B00E2D0BT8X@mta5.snfc21.pbi.net>
MIME-version: 1.0
Content-type: text/plain; charset=ISO-8859-1
Content-transfer-encoding: 7bit

AB;

> The short answer is: When it is a 12SQ7GT.
>
> Works like this. I got some very fine suggestions from you good folks
> regarding the moribund BFO oscillator on my S-38. (Incidentally, Gary,
> since the cathode is grounded one of the diodes is used as a
> not-very-effective noise limiter and the other is unused.) Regrettably,
> none really worked. I was nosing around to try to improve the
performance,
> which was pretty cruddy, and found only 16 v on the detector/preamp plate
> (instead of 60 or so). This tube is also a 12SQ7 and the triode is an
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> preamplifier. I thought the 220k plate resistor might be suspicious, but
> replacement yielded no joy. The grid was biased at about -0.5 v, where
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> oughta be. Hmm, thinks I, this toob is drawing way too much current.
Gassy?

> But my stalwart Hickok 600A sez, "Oh, no, both toobs are FB." Whatever
the
> cause, both 12SQ7's that came in the set were Hytron 12SQ7GT's. I
crammed
> in some old cruddy metal ones and voila! The set comes alive. Triode
> voltage is 64, and the BFO oscillates. But the S38 still has some IF
> oscillation on the high end of band 2, go figure.

I don't buy it. Sure, we know a 12SQ7 (metal) has the steel can tied to
pin 1 and it should be grounded while the 'GT is not shielded. That
conceivably could be the reason the BFO don't work right without the
additional capacitance of the metal tube. But you haven't given us the
whole story. Why 16 volts Eb on the metal and 64 volts Eb on the glass?
What does your scope tell you is going on? Inquiring gremlin hunters would
like to know!

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Date: Sun, 19 Nov 2000 21:08:47 -0800
From: Dan <hankarn@pacbell.net>
Subject: Re: AC Motor info needed
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Message-id: <3A18B1DF.A7A31E36@pacbell.net>
MIME-version: 1.0
Content-type: text/plain; charset=iso-8859-1
Content-transfer-encoding: 8BIT

See, I did a short version of what it does and knew some one would come
up with the full blown explanation. I left out centrifugal because my
spell checker and myself could not agree on the spelling. Hi.

TOUCH... put this ~ thing where it belongs in the french version/

Hank KN6DI

Message-ID: <002901c052f5\$b79da140\$79dab3cf@eqpc1>
From: "Mark Shaum" <k9tr@mtco.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Lighting surge via phone line, my recent experience
Date: Mon, 20 Nov 2000 07:28:05 -0600
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Richard Comments:

>

> The phone is indeed another matter. It is a remote ground voltage reaching

> into your house, and in event of a lightning discharge, it may be thousands

> of volts above or below your local ground, and is a serious danger.

For

> this reason, in power stations they use isolation transformers on the

> telephone circuits to keep everything in the control room at the same

> potential. The telephone circuits are indeed higher resistance, but not

> enough to save you.

>

Allow me to confirm the above. I had a lightning surge enter the house via the underground phone line 5 weeks ago and exit via the AC mains power panel. The surge completely blew past my "surge protector w/phone line protection" that one computer was connected to. The MOV's were intact, the circuit boards they were soldered to were completely charred. Lightning is unpredictable. Knowing of pending thunderstorms that evening, I had disconnected all radios and networked PC's from antennas and AC power, but neglected to pull the phone line to the modem on one PC, so lost the modem on that unit. The surge found its way to an AC branch circuit through an answering machine or the common shack radio/computer ground (guessing a bit here based on visible damage) and two 20A branch breakers blew as the energy found it's way out to the whole-house surge suppressors in the breaker box.

The phone connection block on the outside of the house was shattered and pieces were charred, so it seems to have attempted to bypass some of this energy to ground at one point, dying in the process. The antennas didn't seem to have picked up much energy, as an impedance check of the Polyphaser coax suppressors shows no change from original, so I don't think they played a part. Actually, if the rigs were connected, they may have had a chance to be "in the path" and bypass some of this, but I'm happy to only lose a TS-430S left AC connected and grounded, that somehow got into the path, a modem, all telephones, the answering machine, 2 VCR's and the DSS receivers (telco connected) rather than more of my radios! The doorbell tranny also opened, as it was on one of the branch circuits that this surge passed through.

I have added an ICE telco line protection module now, mounted on its own 8 foot rod near the telco entry point. The rod is tied to one end

of my shack ground rod network a few feet away, which also connects to the mains power entry ground 50 feet away through 1/2 inch copper tubing running just underground outside the house.

I suppose the moral of the story is that while my radios and computer networked gear seemed well protected overall, and a good RF ground exists tied to the AC mains ground as well as the tower ground bus, neglecting to cover the telco line as a probable high energy entry point let the surge into the house bypassing most of my not quite sufficient protection.

Mark K9TR

Date: Mon, 20 Nov 2000 13:39:06 -0500
From: BEN NOCK <G4BXD@compuserve.com>
Subject: Heath SB-102 ?
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <200011201339_MC2-BB83-3482@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
 charset=ISO-8859-1
Content-Disposition: inline

Can anyone help with a decent readable copy of the =

Heathkit SB-102 transceiver circuit diagram and component layout.

cheers, Ben.

MWitMVM
www.qsl.net/g4bxd

Message-Id: <200011201858.NAA14738@maynard.mail.mindspring.net>
Date: Mon, 20 Nov 2000 10:59:33 +0100
Subject: Oddball tube
From: "John Gibson" <gibsonj@mindspring.com>
To: Old Tube Radios <boatanchors@theporch.com>
Mime-version: 1.0
Content-type: text/plain; charset="US-ASCII"
Content-transfer-encoding: 7bit

Found a new but old stock tube in my stuff. Looks like a miniature VHF pencil tube. Type 4043.

Also has a Hewlett-Packard part # 1921-0002.

No use to me but perhaps someone might need it. \$15, which includes shipping.

Message-Id: <4.3.2.7.2.20001120113136.00c8f8e0@mail.islandnet.com>
Date: Mon, 20 Nov 2000 11:42:12 -0800
To: Old Tube Radios <boatanchors@theporch.com>
From: jan@skirrow.org
Subject: Re: AC Motor info needed
Cc: "Richard Brunner" <rbrunner@gis.net>, Arden Allen <gumbear@pacbell.net>, Dan <hankarn@pacbell.net>, "Richard Brunner" <rbrunner@gis.net>, "Rhett T. George" <rtg@ee.duke.edu>, "Howard R. Weeks" <weeksh@bellsouth.net>, "Keith R. Erickson" <kognw@gte.net>, "Arthur I. Larky" <ail0@Lehigh.EDU>, "Brian Bj" <k7ais@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

Thanks to everyone who replied! As usual, a wealth of info.

I had a vague understanding of the purpose of the cap, but had never thought about what would happen if it were open. Indeed, as many pointed out - the motor just sits there and hums. Because of the way it's hooked up, I can't spin the shaft very fast by hand, so can't confirm that the motor will start if it gets some speed on.

I removed the cap - it's a nominal 180ufd, 110VAC 60Hz unit. Unfortunately it tests good.

What I hadn't realized, and some folks pointed out, was that there is a centrifugal switch that takes the cap out when speed is reached. I now assume this switch is open - possibly gunked up with the crud of age.

Now comes the #\$\$% of pulling the motor and seeing if the switch can be reached and fixed.

Thanks again - great list for getting info!

Jan Skirrow, VE7DJX

... in sunny (sometimes rainy) Maple Bay, BC, Canada

"So many radios, so little time"

Please note the new URL for Boatanchor Dreams:

<http://www.skirrow.org/Boatanchors/>

Information, Parts, Pictures, Articles: The R-390A
and other classic gear.

Also, my new e-mail address is:

jan@skirrow.org

Date: Mon, 20 Nov 2000 12:47:15 -0600 (MDT)
From: Richard Loken <richardlo@devax.admin.athabascau.ca>
Subject: Re: Line Cords
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>
Message-id:
<Pine.PMDF.3.95.1001120123937.541150932A-1000000@devax.admin.athabascau.ca>
MIME-version: 1.0
Content-type: TEXT/PLAIN; charset=US-ASCII

In the spirit of purchasing \$1.50 laundry cords or \$450.00 bargain line cords. I work in the Computing Services Department at this totally irrelevant university and we have found (since we were invaded by PeeCee's 15 years ago) that line cords reproduce in the shelves when we go home at night. Last year we threw out a television box full.

When I want a line cord for any purpose I go out to the kennel where they spend all day mating and reproducing and pick out my favourite (and they always have brass blades and not the bright metal blades that cross the Pacific to reach our shores). I was able to find a couple big fat ones for my R390 and much slimmer trimmer ones for more pedestrian projects. I have no idea where those big fat ones come from but there are always more to replace the ones I take home.

And to think that I see these things for sale at hamfests. Here we lock the shop door to prevent people bringing them in.

Richard Loken VE6BSV, Systems Programmer - VMS
Athabasca University
Athabasca, Alberta Canada
** richardlo@admin.athabascau.ca **

End of BOATANCHORS Digest 3040
